

Annex I: Technical specifications

Procurement of IT services relating to the European Parliament's Audiovisual website

1. The European Parliament's audiovisual website: Current situation

The European Parliament's (EP) audiovisual (AV) website primarily offers a content delivery portal for the video, photo and audio material produced by the EP's AV unit. This includes recordings of the EP's plenary meetings, reports and background stories that have been broadcast via Europe-by-Satellite (EbS), photo reports and recordings for radio/webcast. Currently, about 1 TB of material (of which about 400 MB are pictures) is available online. This represents only a small selection from the EP's entirely digitized audiovisual archives. Apart from a content delivery medium and online archive, the website is also a promotional tool for the EP's AV unit, informing visitors about the services offered by the unit, giving an overview of the facilities the EP offers to broadcasters, and allowing journalists to book such facilities through on-line forms. The main users of the website are professional journalists and broadcasters, as well as in-house users, such as the (assistants of the) Members of the EP, and the audiovisual unit's web-oriented sister-units (Web Communications and Webmaster units, part of the same Directorate for Media of the Directorate-General for Communication).

The website solution that is currently in place is focussed around content delivery per FTP. Each user who creates an account receives login data for his/her "private workspace" to which (s)he has access via an FTP-client. The user makes his/her selection online, after which the selected content is copied into the user's workspace, ready for download per FTP. It is also possible for the EP's AV unit to receive content via FTP (e.g. from journalists abroad, broadcasters working with the EP's AV unit, etc.).

All online available content is stored outside of the EP's premises, in a third-party data centre, along with all applications and databases supporting the website. The 11 physical servers used (HP DL380 G5), as well as two connecting switches (Cisco

3560-24), are the property of the EP. The system relies in addition on 8 further virtual servers. Storage of assets is done on the data centre's consolidated "virtual" storage facilities. The EP currently disposes of about 1 TB of online assets (video, photo and audio), at this stage growing at a pace of around 0,5 TB per year. The current heart of the system and backend interface is built on the ADAM digital asset management platform, which utilises a .NET API. Servers run on Windows Server, with IIS as web server software, and ASP.NET (interfacing with the ADAM API) as the main language used for the server pages.

All video content produced by the EP's AV unit, as well as all back-catalogue material, is archived and stored in-house, using Harris' Invenio media management software, on a Sunn LTO robot. For security and reliability reasons, the EP's AV network, of which the archive system is part, has no connection whatsoever to the internet. For this reason, a dedicated, direct and secured link to the third-party data centre used for hosting the EP's AV website is put in place, and allows the upload and download of multimedia assets to and from the website, while blocking direct access to/from the internet through firewalls.

The currently conceived strategy is to continue building on the existing software platform, namely the ADAM asset management platform.

Part of the aim of this call for tender is to obtain an entirely new deployment of the system, using a newly configured hardware setup, entirely virtualised, using, as a sole starting point, the server disk images and storage contents of the current system, which will be supplied to the contractor by the European Parliament.

The EP AV website can be found here: <http://audiovisual.europarl.europa.eu>. In preparing their offer, tenderers are urged to consult the website extensively to familiarise themselves with its features and functionalities.

2. General aim of this call for tender

The European Parliament wishes to establish a four-year framework contract to allow it to procure services for:

1. modifying the EP AV website according to constantly changing needs and requirements, both from external (front-end) and internal (back-end) users;
2. keeping the EP AV website up to date with evolving technologies (both IT/web and audiovisual), particularly those involving social networks (Twitter, Facebook, etc.) and cloud-based file storage and delivery (Dropbox, etc.);
3. improving the user-friendliness of the EP AV website;
4. keeping the EP AV website's graphic design compliant with (changes of) the EP's graphic web charter;
5. integrating the EP AV website with the in-house tools used by the EP's audiovisual unit (archive management system, planning software, photo editing software, ...) and facilitating / automating backend operations;
6. developing special pages or "mini-sites," as part of the EP AV website, for special events (e.g. European elections 2014);
7. providing extensive reporting and statistics on the use of the website, which users log on, at what times, which (type of) audiovisual material is downloaded, etc.;
8. developing specific, smaller, stand-alone applications pertaining to metadata management and exchange, for example for the generation and management of shot-lists to accompany the videos published on the EP AV website;
9. hosting the EP AV website as a platform for multimedia content delivery, and providing maintenance of the hardware and software used;
10. documenting and outlining the current and future EP AV website's architecture and configuration;
11. the support, configuration and development of the European Parliament's (in-house) proprietary audiovisual network, and consultancy regarding the hardware configuration (firewalls, routing, VPN, ...) used for hosting the EP AV website (externally).

3. Technical Specifications: Description of Modules

MODULE 1

Initial infrastructure setup and deployment of the system

The current EP AV website was originally conceived as an FTP-based "private workspace" system for large-file data exchange with broadcasters and journalists, and has evolved into a fully-fledged website, with most development done within the confines of the ADAM digital asset management platform. The back-end interface, consists of a number of adapted and custom-developed ADAM "studios." ADAM utilises a .NET API. Servers run on Windows Server, with IIS as web server software, and server pages coded in ASP.NET (interfacing with the ADAM API).

The current hosting solution uses 11 physical servers (HP DL380 G5), as well as two connecting switches (Cisco 3560-24), which are all the property of the EP. The system relies in addition on 8 further virtual servers. Storage of assets is currently done on the data centre's consolidated "virtual" storage facilities. The EP currently disposes of about 1TB of online assets (video, photo and audio), at this stage growing at a pace of around 0,5 TB per year. A schematic overview of the system's servers, as well as a list of all servers currently being used is supplied as an annex to these technical specifications. All software used on the servers is licensed to the European Parliament.

A dedicated, direct and secured (VPN or other) link to the third-party data centre, providing EP personnel access to the backend system must be part of the solution proposed by the tenderer. Furthermore, firewalls, intrusion detection and any other means deemed necessary to provide state-of-the-art security of the system need to be put into place by the tenderer.

All code, uploaded assets, ADAM licenses, etc. are the property of the EP. Together with the system diagrams and lists supplied as annexes to these technical specifications, disk images of all servers, along with a full copy of the contents of the central storage will be provided to the contractor by the European Parliament.

The tenderer must propose a project plan detailing how the initial setup of the infrastructure for the system will be handled, based on the system data (disk images and storage contents) provided by the European Parliament. This project plan must include an exact indication of the timeframe between hand-over of the necessary system data by the EP, and the becoming fully operational (go-live) of the system.

Further specifications for hosting are to be found in the description of module 3.

MODULE 2

Audit of the EP AV website and full documentation

Performance of a strategic audit of the EP AV website, focussing on the strengths and weaknesses of the website, along with short-, medium- and long-term technical recommendations for the evolution of the system (including but not limited to questions regarding keeping or replacing DAM platform, more or less custom development, outsourcing as cloud service, migration to social media platforms, ...).

As part of this audit, the EP AV website system should undergo a full technical analysis, resulting in full documentation of the system, including:

- technical documentation of the software system: source code overview, inline comments, schema of source code structure, as-built plans of the software, ...
- technical documentation of the hardware system: overview of hardware used, architecture and topology of servers/network and load balancing, configuration of different hardware parts, documentation of security measures, documentation of hardware-software interaction, ...
- end-user manual for the back-end system (for internal users).

MODULE 3

Hosting

A yearly fee should cover the hosting needs for the EP AV website. The basic specifications of the hosting service provided are:

- A suitable number of servers (virtual or physical) to ensure smooth performance of the system, with all necessary software installed. This can be based on the current configuration, but the tenderer should propose measures for improvement (of system performance, or of economy) wherever possible.
- 2 TB of available online storage of the asset library (video, photo, audio; this excludes any further storage, temporary or other, required by the system).
- Minimum 1 Gb/s bandwidth toward the internet, load balanced so as to keep the website responsive for end-users while large file transfers (FTP or other) are in progress. This bandwidth should be guaranteed, and must be constantly monitored.
- A secured, permanent connection between EP offices in Brussels and the website backend, with a bandwidth of at least 100 Mb/s, to be guaranteed and constantly monitored.
- Provision of the FTP-system that underlies the current EP AV website distribution system, giving each end-user FTP-access to assets downloaded to their "private workspace."
- Provision of a simple, general-use, in/out-going FTP-facility for use by EP staff.
- Provision of an e-mail-server, mainly for outgoing mails from the system.
- Elaborate monitoring tool, accessible by designated EP staff, to constantly monitor important system parameters, including but not limited to: bandwidth (WAN and LAN side), disk, and CPU use.

The hardware used will remain the property of the tenderer (unless hardware that is currently the property of the EP would be re-used). The tenderer shall be responsible for performing maintenance on the hardware, and for keeping it up to date. The tenderer shall also provide the necessary operating system and DBMS licenses. Licenses for the ADAM software are already owned by the EP and need not be provided by the tenderer.

A telephonic helpdesk must be available to report any hardware infrastructure problems and to work toward a solution as quickly as possible. In case the hosting part of the contract is subcontracted by the main tenderer, the helpdesk for the infrastructure/hosting would (normally) be contacted by the main tenderer, whereas EP staff would contact the main tenderer's (separate) helpdesk. EP staff should,

however, have the possibility to exceptionally contact the helpdesk for the hosting directly.

The following resolution times and communication intervals regarding infrastructure/hosting are to be observed (or bettered):

Severity level	Expected resolution time	Communication toward EP
Severe impact	8 business hours	1st update: 30 min., thereafter every 2 hours
Serious impact	16 business hours	1st update: 1 hour, thereafter every 4 hours
Minor impact	40 business hours	1st update: 2 hours, thereafter every 12 hours
No observable impact	80 business hours	On demand

The system, including (non-exhaustively) all developed software and source code, software licenses, uploaded assets and other data, configuration files, etc., but excluding hardware, remains at all times the property of the EP. At any time during the contract, the tenderer must be able to provide, within a delay of two weeks, a backup of the entire system. Provisions should also be made for porting the system, as configured at the tenderer's facilities, and all data it contains to a new hosting facility at the end of the contract, or at any time the EP wishes to do so.

In addition to this basic module covering the yearly "standard" hosting fee, the EP must be able to order:

1. Test & staging environment, in order to test modifications and developments before implementing them on the "live" website, for three months.
2. Additional 500GB of storage (on top of the standard 2TB), for one year.
3. Additional (web) server, including database functionality, including desired connectivity to internet (open/close FTP/HTTP ports etc.), security measures, and including possible installation of software provided by the EP, for one year. (One envisaged functionality is the running of a web server with the EP AV unit's planning software installed, which would allow EP staff to consult this planning via the internet.)

4. Possibility to use a Content Delivery Network (such as Akamai or Aspera) for optimised delivery of large-size assets, for a period of 3 months.
5. Increase of public (WAN-side) bandwidth with an additional 1 GB/s for a period of 3 months.
6. Increase of private (LAN-side, VPN/secured) bandwidth with an additional 100 Mb/s for a period of 3 months.
7. DoS-proofing, for a period of 3 months. The tenderer will propose a managed solution to detect and mitigate Denial of Service attacks on the EP AV website. The tenderer will explain its detection mechanisms and defence strategy, as well as the procedures to inform and collaborate with the European Parliament's security teams when a DoS attack occurs.
8. Re-configuration of network hardware (re-configure switches to allow internet access, configure ports, etc.), daily fee for intervention.
9. Provision of streaming facilities to allow users to embed videos offered on the EP AV website and to stream them directly from the EP AV website. Fee per 1GB of streaming volume.

MODULE 4

Support contract, including helpline service

The tenderer shall propose an SLA (Service Level Agreement) for their support and maintenance service. The support offered shall cover the entire software/hardware system, i.e. it should include (but not necessarily be limited to) bug fixes, interventions in the system to solve problems, regular software upgrades, as well as infrastructure-related support such as backup, redundancy of servers, replacement of faulty hardware, hardware upgrades. In general, the SLA should guarantee high response times to assure the continuous and effective functioning of the system, as well as improvements of the system related to updates of obsolete hard- and software.

To this end, the tenderer must offer a telephonic and e-mail-based helpdesk that can be reached during the regular hours of operation of the EP AV unit, i.e. Monday-Friday from 8h00 - 20h00. Extra vigilance and fast response times are particularly needed during periods of intense use of the EP AV website, notably during plenary sessions

in Strasbourg (on average 4 days/month) and during special events (for example during the run-up to the European elections in June 2014).

In case the hosting / infrastructure for the system is subcontracted, the tenderer shall present an overview of the exact procedures that will assure smooth cooperation between the main tenderer and its subcontractor who is in charge of infrastructure, so as to assure quick and efficient resolution of both hard- and software related issues.

The following resolution times and communication intervals regarding software are to be observed (or bettered):

Severity level	Expected resolution time	Communication toward EP
Severe impact	8 business hours	1st update: 30 min., thereafter every 2 hours
Serious impact	16 business hours	1st update: 1 hour, thereafter every 4 hours
Minor impact	40 business hours	1st update: 2 hours, thereafter every 12 hours
No observable impact	80 business hours	On demand

As part of the services delivered for this module, the tenderer must obtain the necessary third-party support services (for example for the ADAM digital asset management system) and upgrade programs.

MODULE 5

Port of system to new hosting location

This module comprises the porting of the entire system to a new location, be it a third-party data centre (with which the European Parliament would have a contract, entirely independent of the contract envisaged by this call for tender), or a data centre operated by the European Institutions.

Everything needed (among which disk images, configuration settings, documentation, etc.) for such a port must be provided by the tenderer.

The tenderer is required to manage the entire porting project, including contacts and arrangements with the new hosting provider. Downtime of the EP AV website during the port should be minimised in any way possible, and should preferably occur during the night and/or weekend. Under no circumstances should the EP AV website be down during the European Parliament's plenary sessions.

Questions regarding the moment of the port, downtime, and other parameters are to be extensively discussed with the European Parliament.

The tenderer is asked to provide an extensive project overview, including a project planning indicating timings (most importantly the duration of the porting operation from start to end), the downtime to be expected at each stage of the project, the resources required and an overview of technical operations and milestones to be completed. He/she should also explicitly indicate how the current EP AV website's hardware will be returned to the European Parliament.

DEVELOPMENT: GENERAL PROVISIONS **(PERTAINING TO MODULES 6, 7 & 8)**

The following general provisions apply to all development done under the contract, i.e. to Modules 6, 7 and 8 (more detailed, additional specifications for which are given below).

A. Location

All activities pertaining to development must be conducted either "on-site" in the European Parliament's premises in Brussels, either in a "near shore" location within a 25 km radius around these premises.

In case of "near shore" development, all project management must be performed "on-site" and a calendar for on-site presence will be established by the European Parliament at the start of each development project. The required on-site presence required (averaged over the duration of a specific development project) can range from 2 up to a maximum of 16 hours per week.

In case of on-site development, the European Parliament will provide a working space in an open-plan office (desk and chair) for up to two of the tenderer's staff. All other equipment and facilities required, including but not limited to computers and internet connection (via 3G data connection or other), are to be provided by the tenderer.

B. Project approach

Three types of development projects should be distinguished:

1. pre-defined, fixed-price development projects (modules 6 and 8);
2. additional development projects (module 7), for which the project management and ordering of the suitable amount of services/resources is handled entirely by the European Parliament;
3. additional development projects (module 7), for which a functional description of the required development is given to the tenderer, after which a proposed project plan and corresponding requirements regarding resources are presented by the tenderer, and further project management is handled by the tenderer (in coordination with the European Parliament's project leader).

All projects, regardless of their type, must

- be implemented using an "agile" or phased approach, with at least two phases. Users should thus be allowed to work with an initial delivery at the end of the first phase, after which feedback and requests for further modifications are gathered, which will be implemented during the second phase;
- include a testing period, by both the tenderer's and EP staff, before delivery at the end of each phase (as described above);
- include full documentation of all code written (inline comments for source code), as well as an update of manuals, and any technical documents (diagrams etc) required for the EP's technical staff to understand the added functionalities on a technical level. All source code written shall be handed over to the European Parliament in electronic form at the end of each project.
- start with a kick-off meeting, include a weekly update meeting with the European Parliament (in person, or via the tenderer's conference call

facilities), and have one or more acceptance meeting(s) at the end of the project;

- provide training to allow users to adopt to the newly developed functionalities should be available, if so requested by the EP;
- come with a guarantee period of two years after project completion/acceptance, during which the European Parliament must be able to report bugs and have these resolved within a reasonable time frame (depending on the urgency and criticality 8 hours to 2 weeks), without any further charges.

Projects of type 3 are to be initiated using the following procedure:

1. the EP confers its functional-level deliverables for a new development project to the tenderer, and may request a meeting (free of charge) with a dedicated member of the tenderer's staff to gather advice on technical or “business”-related matters (e.g. state of the art of social networks, trends in web applications, etc.);
2. the tenderer supplies the EP with a project proposal, including timing / project plan and an overview of the resources it deems necessary to complete the project. This proposal will be delivered free of charge. The tenderer agrees to complete the project, i.e. to meet the functional requirements set out by the EP, within the timeframe, with the resources, and hence for the price proposed in his/her proposal. The tenderer's proposal should thus be understood as a fixed-price quote for meeting the functional requirements set forward by the EP;
3. the EP either accepts or does not accept the tenderer's proposal; the corresponding order for services/resources is placed by the EP if it chooses to do so;
4. the project management will be in the hands of the tenderer, in close co-operation with the EP's designated project leader;
5. all previous requirements for project handling (including agile/phased approach, testing, documentation, meetings, etc.; see above) apply;

6. a suitable acceptance procedure will be set out by the EP in its request for a project proposal. The tenderer can propose additions to the acceptance procedure in his/her proposal.

MODULE 6

Development projects (fixed-price)

For the sub-modules listed below, the tenderer is asked to provide in his/her offer a detailed case study, i.e. a detailed description of the project/development he/she envisages to deliver the functionalities described, based on his/her understanding of the functional and technical properties of the EP AV website, as well as its strategic objectives. The case studies presented should include basic project overview and completion times for each phase, a detailed description of the functional deliverables envisaged, an overview of the technical approach taken, and a detailed list of the (human or other) resources required to complete the project.

1. Integration of metadata management with internal tools

In its current configuration, no integration exists between the EP AV unit's internal tools for metadata management and the ADAM-based EP AV website backend. This results in many manual (copy/paste) operations having to be performed between the website system and internal tools, notably Harris Invenio asset management and Adobe Lightroom.

The tenderer is asked to present a project allowing further integration between these systems, using XML-exchanges (or other, possibly including direct database access via MS SQL) to transfer metadata. It is envisaged by the EP that Harris Invenio (for video) and Adobe Lightroom (for photo) would be used when entering metadata, and that these would be automatically transferred to the ADAM system. Furthermore, an automatic (master to slave) synchronisation between the thesaurus and wordlists (e.g. lists with the names of all Members of European Parliaments, etc.) should be foreseen.

2. Statistics / reporting features and user management

Statistical data should enable the European Parliament to measure the EP AV website's audience and to obtain more detailed knowledge of users' habits. The statistics required must include (but must not be limited to):

- User statistics: user type, users per country, user types per country, users by registration date
- User statistics specifically for media professionals: by media company or agency, by sector, by country the professional works for or is based in
- Download statistics: most downloaded documents (including top 10 assets for respectively video, photo, and audio), downloads per country, downloads per sector, downloads per individual user, downloads per story
- Cross-searches, e.g. "How many pictures were downloaded by Estonian journalists?" "How many photos of EP President Schulz were downloaded by user X or country X or company X?"
- Statistics on the use of the FTP private workspaces (traffic & size monitoring)
- Technical statistics about use of bandwidth over time, disk space use, CPU use on the servers, database calls over time, number of connections to web server over time, downtime/errors, etc.

Additional statistics deemed relevant should be proposed by the tenderer.

All statistics must be able to be queried by fixed (day, week, month, year) and custom date ranges, and by cross-reference.

The tenderer will provide an efficient way to extract the statistics on a regular basis (to be defined together with the EP audiovisual unit) in a concise report, which can be presented to the different stakeholders in the European Parliament. A sample statistic report, adapted to the service proposed for the European Parliament, should be included in the tenderer's proposal. Online access to statistics must be possible, and download of statistics in both XML- and CSV-formats must be possible.

Included in the development for this project must be a convenient interface for user management, which must include allow EP staff to add categories of users (e.g. EP Official, Other EU Institutions, over the categories already present in the back-end system).

3. SEO (Search Engine Optimisation) for multimedia assets

Currently, no SEO (Search Engine Optimisation) has been done to make sure the assets available on the EP AV website would occupy a prominent place in search engine results. Professionally added metadata is nonetheless available in the system.

The tenderer is asked to present a project to increase the ranking of assets on common search engines (most notably Google and Bing), guiding users of search engines to a relevant asset page (page detailing one specific video or photo) of the EP AV website when searching for relevant photo / video material.

4. Additional delivery / sharing methods for multimedia assets

The current system relies on “private workspaces” on an FTP-server. Each registered user has an associated private workspace and can download the assets he/she has selected on the website to this workspace, after which they can be downloaded per FTP (using a personalised login). This system works very well for certain categories of customers and is very suitable for large-file transfers.

Some users, however, find it hard to work with FTP (they do not standardly have a specific FTP-client installed on their workstations, they have a hard time configuring an FTP-client because of proxies, etc.). The tenderer is therefore asked to present a project to extend the available delivery methods. This would include direct download of a single item (over HTTP); delivery to the user’s Dropbox, Google Drive, MS SkyDrive, Apple iCloud; sending via e-mail; and additional sharing methods for popular social websites (Facebook, Twitter, YouTube, Flickr) as well as an embed-functionality to embed video/photo/audio on blogs. Additional delivery or sharing methods deemed relevant and important

should be proposed by the tenderer.

5. Mobile, tablet-oriented version of EP AV website

The EP AV website interface is currently oriented toward use on standard PC screens. No special portable/mobile or tablet-oriented version is available.

Moreover, the video/photo player used on the website makes use of Adobe Flash, which is not supported by some operating systems used on tablets.

The tenderer is asked to present a project to develop a “mobile” version/interface, targeted at tablet-users, of/for the EP AV website. A clear overview of functionalities that would be added and those that would be removed in comparison to the current PC-oriented interface should be provided. The graphic theming/style used (colours, graphic, etc) should be similar to the theming/style of the existing interface.

6. Back-end accessibility over internet

The back-end interface of the EP AV website is currently only available from within the EP’s premises, and only on those PC workstations connected to the AV network (physically entirely separated from the general-purpose EP network).

The tenderer is asked to present a project to allow access to the EP AV website back-end over the internet. This would mainly be used to allow access to the website back-end, via the internet, on PC workstations connected to the EP network. It is very important that ample security restrictions would be foreseen, including but not limited to user and access rights management. The project proposal should include proposed changes in the webserver/firewall infrastructure, as well as the necessary software development to manage access rights.

7. Additional “mini-site”

In addition to the main EP AV website, the need may arise to create an additional website (“mini-site”), dedicated to a special event (such as the European elections

in 2014, etc.) or with a particular target audience, offering a subset of the multimedia assets stored in the EP AV website's database / asset management system.

Such a website would be hosted on the existing facilities and share the ADAM backend system, but would have its own URL (to be registered by the tenderer), offer a custom-designed layout / interface (different from that of the main EP AV website, but in accordance with the European Parliament's graphic charter), 15-20 web pages, offering all or a subset of the assets, with only this subset accessible (selectable, searchable, ...) through the "mini-site," operator-configurable access restrictions (including the option to disable the need to login in order to download assets, i.e. free access and download capabilities for all visitors), a configurable menu structure, and a (simple) content management system to allow EP staff basic editing of the web pages (change texts, insert images / hyperlinks, change page formatting and structure to a limited extent).

The tenderer is asked to propose a project for the development of such a website. It may be assumed that this mini-site is dedicated to the European elections of 2014, although this module should be understood to cover the creation of similar mini-sites with different content, dedicated to other special events or target audiences.

MODULE 7

Additional development and other services

This module comprises procurement by the European Parliament of the services listed below, on a per-day basis (i.e. one person for one day), unless indicated differently:

1. web development

.NET, ASP.NET & C# development, MS-SQL, web content management systems, social network integration, etc.

2. **database development & application integration**
integration of database-driven applications, content-exchange (XML, RSS, SQL, ...) between systems, etc.
3. **graphical design / web design**
design of web graphics, web pages / user interfaces
4. **specialised development / consultancy**
specialised development and/or technical consultancy for any one of the following domains:
 1. ADAM digital asset management platform (notably the ADAM API)
 2. large-file content delivery, Content Delivery Networks
 3. Search Engine Optimisation
 4. Harris Invenio/iMotion integration
 5. AV planning software integration (notably with Provys TVoffice planning software, which is Oracle-based)
 6. IT-based video/audio processing (e.g. configuration / integration / development of transcoding facilities, codecs, video/audio players, ...)
 7. social networks
5. **project management**
of web-development projects
6. **network configuration & network security configuration**
design, configuration and securing of medium-sized LAN (switches, routers, firewalls, ...) & configuration / design of data centre-based web hosting systems (server setup, load balancing, ...)
7. **technical writing**
writing user manuals, providing technical documentation, documenting code (if not covered by developer)
8. **training**
teaching end-users how to use specific (custom developed) web-applications

MODULE 8

Development of a stand-alone application for shotlists (fixed-price)

This module comprises the development of a stand-alone software tool for producing "shotlists." Shotlists are documents that serve as meta-data (descriptive data) for video clips. They contain both descriptive elements that refer to the video clip as a whole (such as title, date, summary, context/background, reference number, location, ...), as well as a list of the different "shots" (i.e. parts or segments) that constitute the clip, which each have their own associated descriptive elements, most important of which are the time codes to mark the beginning and ends of the segment.

The shotlists are intended for publication on the EP AV website and will furthermore be stored, together with their matching video files, in the audiovisual unit's archives, which are managed using Harris' Invenio software.

The requirements formulated in this section should be interpreted as high-level, functional requirements for the system. In the further description of this module, the software that is to be developed will be referred to as "the software," "the application," "the tool," or "the system." The language of the software's interface must be English.

The envisaged system should interact with the Harris Invenio software used for management of the internal archive. Any required support or service by Harris, the developer of this (proprietary) software, is to be obtained by the tenderer. Any eventual expenses associated with such third-party services are to be born by the tenderer.

A. SPECIFIC FUNCTIONAL REQUIREMENTS

A.1. Operating modes

- The tool should have two different operating modes:
 - "stand-alone mode": The software tool (as a "fat client") is installed on a personal computer (e.g. a laptop) that is not connected to a network

and is used for generating files that contain a shotlist (cf. section on shotlist file formats). This mode would be mostly used by journalists and producers working outside of the EP's premises.

- "network mode": The software tool is installed on a personal computer (client) that is connected to the EP's network. On the network, a server with a database containing all shotlists should be available. In "network mode" the tool allows creating new shotlists and storing them in the database, as well as retrieving existing shotlists for modification. The shotlist database should be installed on an existing (Windows) server of the EP (currently of type HP DL360G), on which Microsoft SQL Server 2008 has already been installed and is running.
- It must be possible to store shotlists created in "stand alone mode" in the central shotlist database once the user connects itself to the EP's network.

A.2. Queries

- In "network mode," the tool must allow to perform simple queries (among which on unique ID number, description, etc.) in the shotlist database.

A.3. Storage & export

- It must be possible to use the information stored in existing shotlists (from the central database) to aid the creation of compilation videos (e.g. "best ofs," compiled from the EP's broadcasts during a particular period).
- The tool must allow the user to save/export a shotlist as an XML-file. Every shotlist will have a unique identifier, to be specified by the EP (i.e. the "Europe by Satellite" ID number).
- The exact structure and specifications of the XML-format used (fields etc.) is to be determined at the start of the project by consulting a limited number of key users from the EP. In annex, a shotlist model containing the currently envisaged fields is supplied.
- The tool should also be able to export a shotlist in the following formats (with layout and mark-up to be further specified by the EP):
 - PDF (Adobe Portable Document Format),
 - DOC (MS-Word 2003 and 2010), and
 - TXT (ASCII text).

The naming of the exported files must respect precise rules that will be established by the EP at the project start.

- The tool will allow exporting shotlists (either locally edited, or retrieved from the shotlist database) into the EP's existing Harris Invenio 3 and/or Harris Imotion 3.09 Core Service metadata repository, by using the XML exchange format used by these applications. The integration with these specific applications is integrally and essentially part of the requirements for the envisaged shotlist tool.

A.4. FTP-connection to the EP's audiovisual website

- The software should allow sending an XML-file to a specific folder on the EP's audiovisual unit's webserver by means of an FTP-connection. This is to allow shotlists to be coupled to the video files that are offered for download on the EP's AV website.

A.5. Rights management and user profiles

- In "network mode," a user-specific combination of login and password should be entered in order to connect to the central shotlist database.
- It must be possible to log in as an administrator user in order to add, delete or modify user accounts. Users should be able to change their own password, and the administrator user should be able to retrieve lost passwords.
- The administrator user is able to allow or deny a specific user the right to upload an XML-file to the EP's AV web server (cf. supra).

A.6. Spelling check

- The application offers built-in, automatic checking of English spelling. The performance of this spelling check should be comparable to that of the spelling check of Microsoft Word 2003.

A.7. Lists of authorities and wordlists

- It must be possible to easily insert names from different, user-modifiable lists of authorities (e.g. a list with all current Members of European Parliament, ...) in descriptions of shots and to offer, for a number of specific fields, the

possibility to select a pre-defined term from different, user-editable "wordlists."

- The contractor must make it possible to export lists of authorities and wordlists (i.e. lists of words) from the Harris Invenio 3 and/or Imotion 3.09 Core Service's database(s), using the XML exchange format used by these applications. This integration of the shotlist tool with the fore-mentioned Harris-applications is an explicit part of the requirements for this call for tender.
- Fore-mentioned lists (of authorities and wordlists) will be copied to each client computer running the shotlist application (in order to allow usage in "stand-alone mode"). Every time the shotlist tool is started and an internet connection is available, the client-side copies of these lists will be updated by fetching the updated lists, in a pre-defined XML-format, from the EP's audiovisual unit's web server (by means of an FTP-connection or similar).

A.8. Editing shotlists

- The tool must manage the use of *timecodes* in shotlists. Specifically, it must allow inserting, modifying and deleting shots from a shotlist, resulting in an automatic re-calculation of the timecodes and durations of the other shots.
- The tool must be able to retrieve information from the RSS-feed or the HTML-page of the European Commission on which the EbS (Europe by Satellite) schedule is published, in order to aid the editing of shotlists (copying of titles, references, ...).
- The application must allow users to access and re-use data (titles, references, ...) entered by other users.

B. SPECIFIC TECHNICAL REQUIREMENTS

B.1. Network constraints and suggested architecture

- The specific properties (specifically regarding security) and architecture of the European Parliament's internal audiovisual computer network ("AV-network") and the completely distinct general European Parliament's internal computer network ("EP-network") should be taken into account and suitably incorporated in the solution proposed by the tenderer.

- This is of particular importance for the import/export of shotlists to/from both the audiovisual website (which is connected to the AV-network) and the Harris Invenio metadata system which resides on the AV-network. As stipulated earlier, the shotlist editing software that is the object of this call for tender should reside on a server on the general-purpose EP-network, which has no connection whatsoever to the AV-network.
- A schematic representation of the envisaged technical architecture is therefore provided in annex. Important restrictions concerning the (physically separated) networks existing in the EP are taken into account in this representation. The tenderer is free to propose a different architecture, as long as it takes the technical restrictions that apply into account.

B.2. Backup & failover

- The system (software, including data) should be secured by a backup system that performs a minimum of 2 backups per day.
- It should be possible to assign an additional server (already owned by the EP) as a redundant mirror, with the possibility to perform a manual failover in case of a problem with the main server.

B.3. Further technical stipulations

- The server(s) running the database and application will be managed by the European Parliament's personnel.
- "Hard-client" versions of the software must natively run on a PC with either a Windows XP or Windows 7 operating system.
- The European Parliament's (standard) IT environment is described in a document that can be found in attachment. Any requirement of software or hardware services that are not part of this list should be indicated and their need explained by the tenderer.
- The system must at all times comply with the European Parliament's rules regarding network security. Specific constraints are to be discussed at the project's start.
- The following security components will be installed on all servers by the European Parliament's staff:

- McAfee ViruScan Enterprise & Antispyware Enterprise V8.7i
- McAfee Agent V4.5.0
- operating system security updates (after validation)
- The security restrictions posed by the EP-intranet may impair or inhibit the use of common remote assistance methods. (For example, the EP uses a reverse proxy for all internet connections.) Remote maintenance via a PSTN-modem over the telephone network may be possible, but only after the system has been disconnected fully from the EP's network by an EP official.

B.4. Performance

- The system must be robust, stable and have 98% or better uptime during the EP's audiovisual unit's regular operational hours (see above).
- When users interact with the system, the system must respond immediately to user input.
- Simultaneous multi-user access must be possible.

C. ADDITIONAL REQUIREMENTS

- The **price** quoted by the tenderer for this module must include the costs of:
 - the initial analysis,
 - the creation of prototypes for validation purposes,
 - the actual implementation,
 - testing,
 - installation and roll-out,
 - training courses for both general and administrator-level users,
 - and project management.
- **Full documentation**, for both general and higher-level ("administrator") users must be delivered at the time the first operational version of the software is installed and ready for use. Additionally, technical documentation, describing in sufficient detail the technical architecture of the software, as well as full

documentation of the source code (overview and detailed annotations/comments within the code itself) are required.

- There should be no limit to the number of client computers on which the application can be installed. One single **"all-in" license** (or no specific license whatsoever) must allow the EP to install the application on any computer, be they computers of the EP, computers of external service contractors, or computers of external journalists.
- All required licenses or purchasing costs for **libraries, classes, supporting software services, etc.** which are required for the functioning of the software must be included in the price proposed by the tenderer. Maintenance of these components must be covered by the maintenance service. At the end of the contract, the European Parliament must become to owner of, or must be allowed to continue using, any such components indefinitely without any additional charges.
- **Training** should be offered to both general and administrator/technical users once the software is put into use. The number of general users would be approximately 20, the number of technical users approximately 5. The technical training must cover the application's architecture, procedures for failover and backup, and procedures to be follow in case of operational problems or the manifestation of bugs in the software.
- At any point in time, either during or after the running time of the contract, the **source code** of the software must be consultable by specialised EP staff. After final delivery, the source code must be delivered to and must become the property of the European Parliament, in order for specialised EP staff to be able to modify or extend the application. During the warranty period, the EP will only undertake such modifications in dialog with the tenderer.